

What is claimed is:

1. A circuit for selecting reference voltages in a semiconductor memory device having an internal voltage generator for receiving the reference voltage and generating an internal voltage of a constant level, and having a high voltage generator for receiving and boosting the reference voltage and generating a high voltage of a given level, said circuit comprising:

a first reference voltage generator to generate a first predetermined reference voltage, from a supplied external voltage;

a second reference voltage generator to generate a second predetermined reference voltage, from the supplied external voltage;

a controller to output first and second reference voltage switching selection signals, to select the reference voltage in response to a reference voltage selection signal supplied to the device;

a first switch to supply the first reference voltage to the high voltage generator in response to the first reference voltage switching selection signal; and

a second switch to supply the second reference voltage to the high voltage generator in response to the second reference voltage switching selection signal.

2. The circuit of claim 1, wherein said controller receives the reference voltage selection signal through a pad.

3. The circuit of claim 1, wherein said controller receives the reference voltage selection signal through a fuse option circuit.

4. A circuit for selecting reference voltages in a semiconductor memory device having an internal voltage generator for receiving the reference voltage and generating an internal voltage source of constant level, and having a high voltage generator for receiving and boosting the reference voltage and generating a high voltage of a given level, said circuit comprising:

a first reference voltage generator to generate a first predetermined reference voltage, from a supplied external voltage;

a second reference voltage generator to generate a second predetermined reference voltage, in response to a supply of the external voltage;

a controller to output first and second reference voltage switching selection signals, to select the reference voltage in response to a reference voltage selection signal supplied to the device;

5 a first switch to supply the first reference voltage to the internal voltage generator in response to the first reference voltage switching selection signal; and

a second switch to supply the second reference voltage to the internal voltage generator in response to the second reference voltage switching selection signal.

10 5. The circuit of claim 4, wherein said controller receives the reference voltage selection signal through a pad.

6. The circuit of claim 4, wherein said controller receives the reference voltage selection signal through a fuse option circuit.

15 7. A circuit for selecting reference voltages in a semiconductor memory device having an internal voltage generator for receiving the reference voltage and generating an internal voltage of a constant level, and having a high voltage generator for receiving and boosting the reference voltage and generating a high voltage of a given level, said circuit comprising:

20 a first reference voltage generator to generate a first predetermined reference voltage, from a supplied external voltage;

a second reference voltage generator to generate a second predetermined reference voltage, from the supplied external voltage;

25 a controller to output first through fourth switching selection signals, to select the first or second reference voltage in response to a reference voltage selection signal supplied to the device;

a first switch to supply the first reference voltage to the internal voltage generator in response to the first switching selection signal;

30 a second switch to supply the second reference voltage to the internal voltage generator in response to the second switching selection signal;

a third switch to supply the first reference voltage to the high voltage generator in response to the third switching selection signal; and

a fourth switch to supply the second reference voltage to the high voltage generator in response to the fourth switching selection signal.

8. The circuit of claim 7, wherein said controller receives the reference voltage selection signal through a pad.

5 9. The circuit of claim 7, wherein said controller receives the reference voltage selection signal through a fuse option circuit.

10. The circuit of claim 7, wherein said controller receives the reference voltage selection signal through a mode register set node.

10 11. A method of selecting reference voltages in a semiconductor memory device that has a plurality of reference voltage generators for generating first and second reference voltages, an internal voltage generator for receiving the first or second reference voltage and generating an internal voltage source of a constant level, and a high voltage generator for
15 receiving and boosting the first or second reference voltage and generating a high voltage of a given level, said method comprising the step of:

selecting one reference voltage out of the first and second reference voltages to input to the high voltage generator in response to a reference voltage selection signal supplied to the device.

20 12. The method of claim 11, further comprising selecting one reference voltage out of the first and second reference voltages to input to the internal voltage generator in response to the reference voltage selection signal.

25 13. The method of claim 11, wherein said reference voltage selection signal is input to the device through a pad.

14. The method of claim 11, wherein said reference voltage selection signal is input to the device through a fuse option circuit.

30 15. The method of claim 11, wherein said reference voltage selection signal is input to the device through a mode register set node.

16. An internal voltage supply circuit in a semiconductor memory device, the circuit comprising:

a plurality of reference voltage generators;

5 an internal voltage generator to generate a first internal supply voltage based on a supplied reference voltage;

an internal high voltage generator to generate a second internal supply voltage, higher than the first internal supply voltage, based on a supplied reference voltage; and

control circuitry to supply different combinations of reference voltage generator output to the internal voltage generator and the internal high voltage generator, depending on
10 a reference voltage selection signal supplied to the device.